METHOD, SYSTEM AND APPARATUS FOR CONTROLLED IMPEDANCE AT TRANSITIONAL PLATED-THROUGH HOLE VIA SITES USING BARREL INDUCTANCE MINIMIZATION

ABSTRACT OF THE DISCLOSURE

A system, apparatus and method for controlled impedance at transitional via sites using barrel inductance minimization are provided. In one embodiment, one or more sidewalls of a via barrel are preferably processed such that conductive material disposed thereon is selectively removed thereby forming an inner-via trace connecting one or more conductive traces and/or pads on a first substrate layer to one or more conductive traces and/or pads on a second substrate layer. Removal of conductive material from a sidewall of the via barrel is done in a manner such that an inner-via trace traveling from a first surface to a second surface of one or more substrate layers possesses at least one electrical characteristic substantially approximating a corresponding electrical characteristic of those structures to which the inner-via trace is connected.